

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method for depositing a low dielectric constant film, comprising:

introducing a siloxane comprising two or more silicons and ~~four or more methyl groups~~ from two to five carbons bonded to the silicons into a processing chamber;

introducing at least one oxidizable chemical comprising a member selected from the group consisting of furfuryl, furfuryloxy, and neopentyl into the processing chamber;

reacting the siloxane and the at least one oxidizable chemical with an oxidizing gas at a temperature that retains the member in a conformal layer; and

~~annealing the conformal layer at a temperature sufficient to convert~~ converting the member to dispersed voids.

2-4. (Canceled)

5. (Currently Amended) A method for depositing a low dielectric constant film, comprising:

~~introducing a siloxane comprising two or more silicons and four or more methyl groups bonded to the silicons into a processing chamber;~~

introducing at least one oxidizable chemical comprising a member selected from the group consisting of furfuryl, furfuryloxy, and neopentyl into ~~the~~ a processing chamber, wherein the at least one oxidizable chemical comprises silicon;

reacting ~~the siloxane and~~ the at least one oxidizable chemical with an oxidizing gas at a temperature that retains the member in a conformal layer; and

~~annealing the conformal layer at a temperature sufficient to convert~~ converting the member to dispersed voids.

6. (Original) The method of claim 5, wherein the at least one oxidizable chemical is a silane.

7. (Original) The method of claim 6, wherein the silane is dimethylfurfuryloxy silane.

8. (Original) The method of claim 5, wherein the at least one oxidizable chemical is a disiloxane.

9-15 (Canceled)

16. (Previously Presented) The method of claim 1, wherein the siloxane is selected from the group consisting of 1,1,3,3-tetramethyldisiloxane, 1,3,5,7-tetramethylcyclotetrasiloxane, and octamethylcyclotetrasiloxane, and the at least one oxidizable chemical is dimethylfurfuryloxy silane.

17. (Canceled)

18. (Currently Amended) The method of claim 1, further comprising depositing a silicon carbide layer on the conformal layer prior to the ~~annealing the conformal layer~~ converting the member to dispersed voids.

19-20 (Canceled)

21. (Previously Presented) The method of claim 1, wherein the at least one oxidizable chemical is difurfuryl ether.

22. (Currently Amended) A method for depositing a low dielectric constant film, comprising:

introducing a siloxane comprising two or more silicons and four or more methyl groups bonded to the silicons into a processing chamber;

introducing at least one oxidizable chemical comprising a cyclic ring consisting of carbon[[,]] and oxygen, ~~and hydrogen~~ into the processing chamber;

reacting the siloxane and the at least one oxidizable chemical with an oxidizing gas at a temperature that retains the cyclic ring in a conformational layer; and
converting the cyclic ring to dispersed voids.

23. (Previously Presented) The method of claim 22, wherein the oxidizable chemical is selected from the group consisting of vinyl-1,4-dioxinyl ether, vinyl furyl ether, vinyl-1,4-dioxin, vinyl furan, methyl furoate, furyl formate, furyl acetate, furaldehyde, difuryl ketone, difuryl ether, difurfuryl ether, furan, and 1,4-dioxin.

24. (Previously Presented) The method of claim 22, wherein the oxidizable chemical is difurfuryl ether.

25. (Currently Amended) The method of claim 24, wherein the siloxane is selected from the group consisting of 1,1,3,3-tetramethyldisiloxane, 1,1,5,5-tetramethyltrisiloxane, and 1,1,3,5,5-pentamethyltrisiloxane, 2,4,6-trisilaoxane, and cyclo-1,3,5,7-tetrasilano-2,6-dioxy-4,8-dimethylene.

26. (New) The method of claim 1, wherein the dispersed voids are formed by annealing the substrate.

27. (New) The method of claim 1, wherein the siloxane comprises four or more methyl groups bonded to the silicons.

28. (New) The method of claim 1, wherein the siloxane is selected from the group consisting of 1,1,3,3-tetramethyldisiloxane, 1,1,5,5-tetramethyltrisiloxane, 1,1,3,5,5-pentamethyltrisiloxane, 2,4,6-trisilaoxane, cyclo-1,3,5,7-tetrasilano-2,6-dioxy-4,8-dimethylene, 1,3,5,7-tetramethylcyclotetrasiloxane, and octamethylcyclotetrasiloxane.

29. (New) The method of claim 5, wherein the dispersed voids are formed by annealing the substrate.

30. (New) The method of claim 5, further comprising introducing a siloxane comprising two or more silicons and from two to five carbons bonded to the silicons into the processing chamber and reacting the siloxane with the oxidizing gas.
31. (New) The method of claim 30, wherein the siloxane comprises four or more methyl groups bonded to the silicons.
32. (New) The method of claim 30, wherein the siloxane is selected from the group consisting of 1,1,3,3-tetramethyldisiloxane, 1,1,5,5-tetramethyltrisiloxane, 1,1,3,5,5-pentamethyltrisiloxane, 2,4,6-trisilaoxane, cyclo-1,3,5,7-tetrasilano-2,6-dioxy-4,8-dimethylene, 1,3,5,7-tetramethylcyclotetrasiloxane, and octamethylcyclotetrasiloxane.
33. (New) The method of claim 22 wherein the dispersed voids are formed by annealing the substrate.
34. (New) The method of claim 22, wherein the siloxane comprises four or more methyl groups bonded to the silicons.
35. (New) The method of claim 1, wherein the oxidizing gas is carbon dioxide.
36. (New) The method of claim 35, wherein the at least one oxidizable chemical comprises a neopentyl group.
37. (New) The method of claim 5, wherein the oxidizing gas is carbon dioxide.
38. (New) The method of claim 37, wherein the at least one oxidizable chemical comprises a neopentyl group.